Escuela Especializada de Ciencias, Matemáticas y Tecnología "CIMATEC"

Caguas, P.R.

Received & Inspecte

DEC 20 2010

**FCC Mail Room** 

December 16, 2010

Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, D.C. 20554

WC Docket No. 10-222

Dear Sir or Madam:

We are hereby submitting an application for the E-RATE DEPLOYED UBIQUITUOUSLY (EDU) 2011 PILOT PROGRAM. We feel this FCC funding would be a perfect opportunity for the enhancement of our school's innovative Mathematics Network Project and would avail additional students of the opportunity to experience problem solving and investigation from a whole new and more motivating technological perspective and experience.

We welcome this opportunity to share our work, to bring more equitable educational services to the students in Puerto Rico and if provided the opportunity to promote the Mathematics Network Project as a best practice initiative to be replicated in many other schools in the island.

Sincerely;

Mrs. Raquel Rodriguez, E.D,

School Director

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# E-RATE DEPLOYED UBIQUITUOUSLY (EDU) 2011 PILOT PROGRAM APPLICATION

WC Docket No. 10-222

**Project Name**: Mathematics Network

School: Escuela Especializada de Ciencias, Matemáticas y Tecnología "CIMATEC", Caguas, Puerto Rico

**BEN**: 16046653

• Full description of the current Applicant Wireless Program, including:

a. **the nature of the Applicant Wireless Program**, including the extent to which the use of connectivity is interactive and utilizes the Internet.

The Mathematics Network Project at CIMATEC School uses the **i-Phone** and ATT's data and voice service as an initiative to integrate technology into the Mathematics teaching process taking it beyond the classroom and into the students' everyday learning process wherever they might be. To motivate students, the Project has been designed as a competition through which groups of students can practice in virtual mode the topics that are discussed in class at the same time they develop leadership skills, cooperative learning strategies and improve their skills in time management, study habits and technology integration.

## Throughout the process **Students**:

- Create a specific email for the project.
- Form 5 groups: of 4 participants.
- Select a leader for each group through each members vote.
- The leader will be the principal contact for organizing and reporting on the ideas presented by the group.
- Each student will be assigned an iPhone.
- Each group will chose a name, and a topic related to technology and math.
- Students will be trained on the use of the iPhone and the rules of the competition.
- Each student will receive daily math problems (after school). Students must communicate and agree upon a specific time to meet virtually (conference call and White board) to solve the problem.
- The solution to the problem must be sent to the teacher (a document and audio of the discussion that took place)

#### The Teacher:

- Develops the Project's evaluation instruments (pre-test and post-test)
- Develops practice exercises
- Sends the exercises to the students
- · Receives the problems solved and grade them
- Provides online support to the students through conference call and White Board
- Manages the students' performance data base

The equipment uses: **Voice** – to coordinate conference calls, hold meetings, record exercises in the teacher's voice mail and communicate with the teacher in the event of questions and for technical support.

**Data** – To download applications, receive emails with the math problems, plan virtual meetings, use white board, search for information and conduct research.

The **Applications** used are – *Mobicip* – Filtered information search. *White board* – discussion of virtual exercises and *Genius Scan* –to digitalize exercises.

b. how long the Applicant Wireless Program has been in operation and the mobile wireless device(s) being used,

The Project has been in operation since October 5, 2010 and is currently successfully running.

- c. a description of any technical issues associated with implementing the Applicant Wireless Program, including an analysis of any problems with the availability of wireless access to students or patrons off the school or library premises and how those issues are being or will be addressed by the school or library.
  - i. Connectivity problems- Student orientation
  - ii. Loss of voice service Student orientation
  - iii. Defective equipment equipment replacement
  - iv. Battery charge loss Orientation to students to reduce brightness in the screen. Increase time of receiving emails. Deactivating applications not in use.
  - v. Loss of 3G Network
  - vi. Applications running slow upgrade to the latest version of the operational system for the iPhone.
- d. what training has been or will be provided to teachers, librarians, students or parents to implement the Applicant Wireless Program

#### Parents have been trained on:

- 1. Information on the Project
- 2. Orientation and signing of responsibility agreement
- 3. Use Policies
- 4. Project Regulations
- 5. The Content Filter
- 6. The Call Filter

They are also trained on the security tools available to monitor the content accessed by their children in the Internet and to control the calls they receive.

## Teachers are trained on the:

- 7. Use and management of the equipment
- 8. Applications:
  - Mobicip, Safari, AdressBook, Genius Scan, and White Board, App Store, Voice Recording, Camera, Youtube, Calendar, Mail, Voice Mail My Point and notes
- Mathematical Network:
   Digitalizing of content, Conference call, Distance Education using the iPhone and Voicemail

#### Students are trained on the:

- 10. Use and management of the equipment
- 11. Applications:
  - Mobicip, White Board, Voice Recording, Camera, Calendar, Mail, Voice Mail, My Point and notes
- 12. Mathematical Network:

Conference call, Distance Education using the iPhone, Voicemail

- e. the extent to which the Applicant Wireless Program is integrated with federal, Tribal, state, regional or local governmental or non-profit initiatives to achieve educational or community access outcomes:
  - During this initial phase the Project is only integrated with the local government through the municipality's and public/private collaborative that funds the CIMATEC School and the programmatic collaboration that the school has with neighboring universities and private industries. Upon further development of the Project it is planned that the project model will be extended to other public and private schools in the island as a best practice and innovative strategy in the teaching of math.
- (2) the poverty level based on the percentage of students eligible for a free or reduced price lunch under the national school lunch program (NSLP) or a federally approved alternative mechanism, and the current discount rate of the school or library;
  - Nearly half of Caguas' 142,000 residents (where the school is located) had incomes below the federal poverty level, and 92 percent of public school students qualified for free or reduced-price lunch. According to the datacenter.kidscount.org the percentage in the neighboring communities where students who attend the school live ranges from 35.4%-47.2%.
- (3) the financial need of the school or library, including any additional budgetary hardships, notwithstanding the school or library's current discount rate;
  The budget is included on pages 14-15. Currently the annual need for the implementation of the wireless project totals: \$33,115.80. A two year cost analysis is included on pages 16-17.
- (4) all costs, including those eligible for E-rate support and those not eligible for E-rate support, associated with implementing the Applicant Wireless Program, including but not limited to costs for equipment such as e-readers or laptops, access and connection charges, teacher training, librarian training, or student/parent training;
  The costs of implementing the wireless program totals \$33, 115.80.
- (5) the committed school or library resources available to implement the entire Applicant Wireless Program, including whether those funds are from the school or library's general budget or from an outside funding source;
  - The school has earmarked a two year budget totaling \$66,231.61 to the implementation of Project.
- (6) the effect EDU2011 support for off-premise connectivity is likely to have upon the school's or library's projects; The support for off premise connectivity afforded to this students through this project allows students to be continuously engaged in the learning process. It avails them of the resources and access through the wireless connectivity so they can conduct research and can collaborate off the school premises. It also multiplies the learning effect as it impacts upon parents and other siblings in the family unit as well as friends in the student's network; thus the educational factor is maximized exponentially. Also the motivation provided by the state of the art technology available to them (a large number of these students are below poverty level and cannot afford this type of technology) as well as the continuous connectivity and the portability takes the classroom outside of the school and into the home and the community maximizing learning time and potential.

The coordination among the students promotes cooperative learning and the fact that the group leadership rotates according to the skill being developed provides for ample learning opportunity. "Each group receives the math exercises daily, coordinates with its classmates and a student solves the problems virtually while the remaining students observe through White Board and listen through the conference call. If any of the students has questions the rest of the group provides assistance, if all students have questions the teacher can be added to the conference call using the White Board application.

(7) an analysis of the cost-effectiveness of the current or planned Applicant Wireless Program as compared to the use of other types of technology that would also meet the Program's objectives;

The all times any where data and voice connectivity is a Wireless Program requirement and at this time, the only solution locally available (Puerto Rico) is the combination of the AT&T iPhone with the bundled software applications. Other existing wireless platforms do not support the software applications. Other Wireless Programs work only on WiFi mode, thus they do not meet the at all times availability requirement. The detailed analysis of the costs of the wireless program is included on pages 16-17.

- (8) any relevant technology planning documents and, if applicable, a statement of long-term objectives for the Program;
- (9) a description of the specific measures taken, or that will be taken, to ensure compliance with the Children's Internet Protection Act and measures to protect against waste, fraud, and abuse:
- b. Use Policies
- c. Regulations
- d. Content Filter
- (10) a description of internal policies and enforcement procedures governing acceptable use of the wireless devices used in the Program off the school or library's premises.

The internal policies include Policy of Use for the iPhone and the Internet and are included below.

#### 1. Purpose:

- 1.1. Each participant will have a PDA (iPhone 3g-8GB) with 3G Internet Access and a limited calls plan. This communications system will allow users to be connected at all times, exchange information via voice, files, drawings, and email. Users will also be able to use different applications that will enable them to stay connected and to perform their tasks within the Project.
- 2. Limitation of School's Responsibilities:

2.1. The school does not guarantee in any form, direct or implicit that the services provided by ATT or through this Project's system are free of defects or errors. The school is not responsable for damages incurred upon by the user, including but not limited to loss of equipment or service interruption. The school is not responsible for the financial obligations from the use of the system or project expenses.

#### 3. Due Process:

- 3.1. The school will fully cooperate with local or federal officials in any investigation conducted for any illegal activity incurred upon by PDA users.
- 3.2. In the event of an allegation of a user violating the acceptable regulations on the use of the equipment use regulations, they will be notified and will be given an opportunity to be heard in the manner stipulated in the regulations for Equipment Use.
- 3.3. Sanctions will be established by the school and will be in accord to the violation incurred upon.

## 4. Monitoring:

- 4.1. Users have limited privacy in the use of Internet as well as all calls made and received.
- 4.2. Routine monitoring as well as system monitoring can lead to the discovery of a violation on acceptable use, of the schools regulation or the law.
- 4.3. Should there be reasonable suspicion that a user has violated the law or the discipline code he or she can be subject to an individual investigation. The nature of the investigation will be reasonable in the context of the alleged violation.

## 5. Notification to parents and their responsibility:

- 5.1. The school will notify the parents about the Project and about the regulations on its use. The parent or legal guardian will sign the agreement to allow for the student's participation in the Project. Parents have a right to investigate the content of the files that will be sent to the students. Parents have the right to request the cancellation of the student's participation in the Project at any time.
- 5.2. The regulations for acceptable use include access restrictions to inadequate material. However there is a great variety of material available in the Internet, some which may not be acceptable to the family's values or beliefs. It is not possible to be able to control or impose a great variety of social values and mores in the use of the Internet.

## 5.3. Unacceptable use of email

- 5.3.1. Users will not post any personal information or that of another person including home address, phone, school address, work address, among other personal information.
- 5.3.2. Users will not agree to meet with a person they have met online without the approval of the parent or legal guardian. Users will communicate to their parents, teachers, legal guardian or other School Staff any messages receive with an inappropriate content or that makes them feel uncomfortable.

## 6. Activities with Legal Ramifications

- 6.1. In the event of a loss or accident with an iPhone or any equipment provided for the purpose of the Project, the parent or legal guardian will be liable and will have to pay for the cost of the lost equipment.
- 6.2. The parent or legal guardian must complete a sworn statement in the event of the loss or accident of the iPhone.
- 6.3. The users will not employ the system for any type of criminal activity such as purchasing of alcohol, participate in any criminal or gang activity or threaten the safety of another person, etc.

## 7. Network Policy

7.1. It must follow the policies established by the service provider.

#### 8. Inadequate Language

- 8.1. Restrictions against inadequate language apply to public messages, private messages, and calls made or received with project equipment.
- 8.2. Lascivious, obscene, profane, vulgar, libelous, threatening or disrespectful, language cannot be used.
- 8.3. Users cannot reveal information that can cause danger, disorder or harm.
- 8.4. Users will not make personal, prejudice or discriminatory attacks.
- 8.5. Users will not harass other people. Harassment is to act persistently in a manner or form that bothers another person.
- 8.6. Users will not disclose knowingly false or libelous information about a person or organization.

#### 9. Respect of Intimacy

- 9.1. Users will not resend a message that was privately sent to them without the permission of the person who sent the message.
- 9.2. Users will not disclose private information about another person.

#### 10. Inadequate Access to Material

- 10.1. Users will not use the network to Access profane or obscene material (pornography), incite ilegal or dangerous acts, or violence or discrimination towards others (hate literature). Special exceptions can be made in cases where research is being conducted and both the teacher and the parent approve. The parent must present a written approval as evidence.
- 10.2. If a user accesses mistakenly such information, he/she must communicate the inadvertent access in the manner specified by the school. This will protect users against any allegation that they have intentionally violated the norms of acceptable use.

## 11. J. Your Rights

#### 11.1. Free Speech

11.1.1. Your right to free speech, will be imposed as have been imposed the regulations of the Project, those which will apply to your text messaging as well as to the telephone calls. The Project will not restrict your right to free speech based on the disagreement which you may have expressed.

## 11.2 Monitoring

- The privacy of the content of the personal files in the system, the registry of the online activity and the supervision of incoming and outgoing calls is limited. Routine monitoring could lead to the discovery that you have violated the Project regulations or Acceptable Use Policy.
- An individual investigation will be conducted if there is reasonable doubt that you have violated the Policy of Acceptable Use or Project Regulations. The investigation will be reasonable and equitable to the alleged violation.
- 11.2.3 The parent or legal guardian will have the right at any given time of requesting to see the content of the email.

#### 11.3 Due Process

- 11.3.1 The service provider will totally cooperate with the local, state or federal officials in any investigation related to any illegal activity conducted in the network.
- 11.3.2 If there is any allegation that you have violated the regulations of the use of the PDA or Access of the Internet in the Project you will be notified and given an opportunity to be heard, in accordance with the School's regulations.
- 11.3.3 If the violation encompasses a violation of the school provisions, such will be handled in the manner described in the school regulations manual. Additional restrictions could be included in the use of the email account.

# Mathematics Network CIMATEC School

Participation Agreeme	<u>ent</u>		
Student:			
Name:		Grade:	Series No:
Cel. Number. :			
regulations.	tify that I have read and understa I agree with all the regulations set f this policy I can be expelled from the	orth in this policy and und	
Student signa	ature	Date	
Parent or Legal Gua	dian:		
	tify that I have read and understa nd that I will supervise my son/daugh		
	letter I release the school, its person damages of any nature for the use or		
	my son/daughter in relation to the re nentioned in the Policy of Internet U		
transfer, sen	rize my son/daughter to participate in d or receive email, make or receive ca o the following numbers:	alls between participating	students and teachers of the
[ ] I do not	authorize my son/daughter to partici	pate in the Project	
Name of Par	ent or legal guardian	<u> </u>	
Signature of	parent or legal quardian		Date

## Regulations -Students

- I-Phone
- Internet
- 1. No downloading or installation of applications without authorization.
- 2. Using only for educational purposes.
- 3. No blocking of applications, no assigning or changing the iPhone "Password".
- 4. No outgoing or incoming calls from any other numbers than the two assigned by your parents.
- 5. No access to Internet pages that support violence, pornography etc.
- 6. The use of data and calls will be monitored.
- 7. The plastic cover protecting the iPhone screen cannot be taken off at anytime
- 8. The iPhone cannot be used during class time without teacher authorization.
- 9. The parent or legal guardian of the student that loses or damages the equipment commits to paying for said equipment in the amount of \$535.00.
- 10. The teacher in charge of the Project that loses or damages the equipment commits to paying for said equipment in the amount of \$535.00.
- 11. Participating students and teachers of the Project will have unlimited calls among themselves and limited calls to the two numbers stated in the form.
- 12. Non-compliance with these or several of the regulations will require the participant be evaluated by the Project's Discipline Committee. Sanctions will be made based on the severity of the violation committed and decisions will be rendered by the Committee.

Student Name:	Date:
Student Signature:	

# Regulations-Teachers

- I-Phone
- Internet
- 13. No downloading or installation of applications without authorization.
- 14. Using only for educational purposes.
- 15. No blocking of applications, no assigning or changing the iPhone "Password".
- 16. No outgoing or incoming calls from any other numbers than the two assigned numbers.
- 17. No access to Internet pages that support violence, pomography etc.
- 18. The use of data and calls will be monitored.
- 19. The plastic cover protecting the iPhone screen cannot be taken off at anytime.
- 20. Not using during class time.
- 21. The teacher in charge of the Project that loses or damages the equipment commits to paying for said equipment in the amount of \$535.00.
- 22. Participating students and teachers of the Project will have unlimited calls among themselves and limited calls to the two numbers stated in the form.

23.	. Non-compliance with these or several of the regulations will re Project's Discipline Committee. Sanctions will be made based on decisions will be rendered by the Committee.	
	Teacher Name Da	ate:
	Teacher Signature	<del></del>
24. 25. 26. 27. 28. 29. 30. 31. 32.	Internet  No downloading or installation of applications without authorization. Using only for educational purposes. No blocking of applications, no assigning or changing the iPhone. No outgoing or incoming calls from any other numbers than the two numbers to late and calls will be monitored. The use of data and calls will be monitored. The plastic cover protecting the iPhone screen cannot be taken on Not using during class time without teacher authorization. The parent or legal guardian or the student that loses or damage equipment in the amount of \$535.00. Participating students and teachers of the Project will have unlicated to the two numbers stated in the form. Non-compliance with these or several of the regulations will reproject's Discipline Committee. Sanctions will be made based on decisions will be rendered by the Committee.	"Password".  wo assigned numbers.  etc.  If at anytime  s the equipment commits to paying for said  imited calls among themselves and limited  equire the participant be evaluated by the the severity of the violation committed and
	Signature of parent or legal guardian	Date
INFOR	RMATION REQUIRED FROM THE SCHOOL:	
The sch	e location of the school; hool is located in the municipality of Caguas, P.R. and serves 233 , Las Piedras, Rio Grande, Maunabo, Naguabo.	students from neighboring towns such as:

(2) The name of the school applicant, along with a complete list of the individual schools that will be served,

including their billed entity numbers;

The name of the applying school is CIMATEC, its director's name is Mrs. Raquel Rodriguez. Since the school accepts students from neighboring schools that fulfill the admissions criteria, it is serving students from other schools but they are being served at CIMATEC's site not at their original schools.

(3) a description of the school district or school, including the type of school, such as private, public, charter, or other special type of school;

CIMATEC is a middle school similar in its nature to a Charter School. The school began operations in 2008 with 80 students and is aiming for a total of 500 by the next two years. It is located in the municipality of Caguas but also serves students from nine other different municipalities. Caguas is 20 miles south of Puerto Rico's capital of San Juan. Even before the recession, nearly half of Caguas' 142,000 residents had incomes below the federal poverty level, and 92 percent of public school students qualified for free or reduced-price lunch.

The school which cost \$4.5 M with a contribution of \$1, 250,000 from the Compañía de Fomento Industrial (CFI) "the Industrial Manufacturing Company" and \$3,250,000 from the Municipality of Caguas is located in front of the public plaza and began with a group of seventh graders and will continue adding grades until reaching the twelfth grade. Currently the school has 233 students.

It is administered with a budget slightly over 1M which comes from funding from these nine municipalities, private industry, contributions from participating parents and federal agencies such as NSF. It has state of the art equipment and classrooms and labs conducive to higher learning. The Students who wish to attend the school must: go through a rigorous admission process which includes a 3.50 or higher, pass an examination from the College Board, must have participated in a science fair during elementary school, must have performed community work and present recommendation letters as well as participate in an entrance interview and prepare an essay.

The students have ranked in the first three places in the student honor society, regional math and science competitions. The school is also being considered by various university professors from the University of Puerto Rico at Mayagüez Campus as a possible hub for the development of future science teachers and physicists.

(4) a description of the Program's curriculum objectives, the grade levels included, and the number of students and teachers involved and/or being served as part of the program; and

The school has holistic curriculum which is integrated in sciences, math and technology as well as a varied extracurricular offering that includes a variety of clubs as well as French class and robotics competitions. The program's curriculum objectives are: to improve the academic achievement of participating students in mathematics, improve the critical thinking and problem solving skills of the participating students; enhance the cooperative learning process of participating students and augment participating students learning time and study skills through off premise connectivity. Currently the program includes 8th grade students. The school includes a total of 233 students and 20 teachers that are currently participating in the project.

The Department of Education of the Caguas Municipality in collaboration with the Iniciativa Tecnológica Centro-Oriental (INTECO) "Centro-oriental Technology Initiative" collaborated to develop CIMATEC. The school's purpose is to promote the love of science, math and the various technologies; becoming a magnet school that attracts the most talented students in the area. It aims to prepare more students in the areas of science, math and technology in order to establish a more competitive and technologically oriented labor force.

## The school offers:

1. A variety of courses in math, science and technology.

- 2. Provides an articulated curriculum, integrated, flexible and interdisciplinary.
- 3. Promotes research.
- 4. Reinforces experiences to drive students from theory to practice.
- 5. Promotes innovative projects.
- 6. Integrates technology in the different courses.

#### Mission

CIMATEC is a Learning Community that provides a unique environment of academic excellence so that students in the east region of Puerto Rico can:

- Demonstrate adequate ethical values.
- Explore the interconnection between science, math, technology and society.
- Maximize their talents.
- develop the necessary competencies so that as adults they can positively impact an ever changing global society.

#### Vision

A school that is:

- Dynamic and unique, centered in the student and focused on providing a learning environment that promotes the development of its students' maximum potential, with the goal of transforming them in men and women capable of changing society through research, experimentation and development in the field of sciences, math and technology.
- The ability to develop students with character and a deep social responsibility.
- An educational model for Puerto Rico.

#### Philosophy:

CIMATEC's philosophy is based on the fact that each student is a valuable and indispensable human being in a democratic society and as a student he/she must develop to his/her maximum potential with the help of his/her parents and teachers. The school provides a positive direction in an academic environment that provides each student with opportunities to develop from an integral perspective, providing physical, moral, spiritual, social and intellectual experiences.

Its socio-humanistic educational philosophy aims to develop a new generation of leaders with new and vast scientific knowledge and technological skills. The curriculum provides ample space for theory, practice and research in order to construct the necessary knowledge for the student's transformation.

(5) a summary of any data collected by the school on Program outcomes and achievement of Program objectives.

Since the program is fairly recent results between the experimental and control group will not be available until May 2011. However teacher observation has reflected that students have adapted well to the innovative learning strategy and are motivated and responsive. Although there were diverse problems with a number of the equipment, they were solved and students have improved considerably the coordination, planning and problem solving activities. The fact that they must solve the problems and speak in front of the group their self-confidence has increased which has helped them in test taking and oral presentations. Once the data is collected it will be available for submission.

## CIMATEC SCHOOL- BUDGET 2010 - 2011

Estimated Income		
Category		
Municipality of Caguas	\$ 560,000	\$ 500,000
Parents contribution	480,000	
Allowance for doubtfull accounts 10%	(48,000)	_
Municipality of Juncos		
Municipality of Cayey		
Municipality of San Lorenzo		
Municipality of Gurabo		
Municipality of Humacao		_
Total Income	\$ 992,000	
Legal & Professional Allocations		
Professional Services for Specialized Support	33,093	_
	33,093	
Other Professional Services		
Consulting for identification of funds	•	_
School Payroll		
CIMATEC Staff	770,208	_
	770,208	
Payroll Allocations		
Employee	Allocation	
INTECO Support staff	67,375	_
	67,375	
Operational Costs		
Professional Services	37,000	
401K	-	
Office Supplies	18,069	8,000
Supplies Lunch Room	13,000	
Supplies Chemistry and Physics materials	40,000	
Field Trips	300	2,000
Travel Students	11,550	3,000
Insurance	10,000	2,000
Publishing	1,000	10,000
Postage	3,000	1,000
Repair & Maintenance Materials Cleaning sanitation	16,612	1,000
Telecommunications	6,000	18,000
Others	1,620	1,000
Printing	29,704	
Medical Equipment - others	1,500	500

Structural Repair & Maintenance	12,530	20,000
Repair & Maintenance of Equipment	10,000	3,000
Software purchase	24,000	59,711
Training	9,000	6,000
Sports materials	2,000	
Library maintenance	5,000	19,000
Inspections from health and fire department	600	
Program Activities	820	
Fees and subscriptions	4,950	10,000
	258,255	94,711
Equipment		···
Equipment computers & printers for teachers		
Balance	\$(141,773)	<u>-</u>

**Comparison of Costs: ATT** 

Quantity	Description	Price (unit or monthly)	Total Amount
28	I-Phone 3G	\$99	\$2,772.00
28	Data and Voice Contract (monthly for one years).	\$60	\$20,160.00
1	Mobicip, filter	\$4.99	\$4.99
28	Update Mobicip (annually)	\$9.99	\$279.72
1	White board	\$1.99	\$1.99
4	Training ( 1 hour)		\$1,500.00
	Internet solution maintenance service	\$85/hr. 8hrs/month -12 months	\$8,160.0
28	Accessories( iphone pen +covers)	25	700.0
		Sub Total	\$33,578.70
		Sales Tax	\$2,852.9
	Total		\$36,431.69





The White Board software is the same for T-Mobile and for Att. The difference is that White Board for TMobile phones does not work on a 3G network, only wifi. It is a requirements for the Project that it work on a 3G Network, since students will be working mathematical problems at all times.

## **Comparison of Costs T-Mobile**

Quantity	Description	Price (unit or monthly)	Total Amount
28	Samsung vibrant	189	\$5,292.0
28	Voice and Data Plan (monthly for one years).		
		65.00	\$21,840.0
1	family allowance	4.99	\$4.9
1	White board		<b>C</b> 1 (
	vville board		\$1.9
4	Training( de 1.horas)		\$1,500.0
	Support and maintenance	\$85/hr for \$8hrs/month for 12 months	\$8,160.0
		Sub Total	\$36,798.9
		Sales Tax	\$371.0
	T - Mobile -	Total	\$37,169.9

The White Board software is the same for T-Mobile and for Att. The difference is that White Board for TMobile phones does not work on a 3G network, only wifi. It is a requirements for the Project that it work on a 3G Network, since students will be working mathematical problems at all times.